

## AMENDMENTS TO THE CLAIMS

### **Claims 1-7 (Cancelled)**

**Claim 8 (New)** A sensitivity enhancement apparatus to be connected to a chaos theoretical voice diagnosis apparatus for use as a preprocessing device, the sensitivity enhancement apparatus comprising:

a voice input apparatus for acquiring an uttered voice;

an analog-to-digital conversion apparatus for converting the acquired uttered voice to digital voice data;

a comparator for selecting, from the digital voice data, voice data having a first level greater than or equal to a certain level, and for outputting the selected digital voice data;

a voice data cutout apparatus capable of cutting out a phoneme unit of the selected digital voice data of a second level which is greater than or equal to the first level, and including an offset section for (i) providing a cutout start moment and a cutout end moment, according to which the cutout apparatus cuts out the phoneme unit and (ii) providing an offset value less than or equal to one phoneme; and

a voice data output apparatus for outputting the phoneme unit cutout by the voice data cutout apparatus,

wherein, when the cutout end moment is located at a middle of a phoneme of the phoneme unit cut out by the voice data cutout apparatus, the voice data cutout apparatus is operable to shift the cutout end moment to an end of the phoneme by shifting the cutout end moment by the offset value, and

wherein, when the cutout start moment is located at a middle of a phoneme of the phoneme unit cut out by the voice data cutout apparatus, the voice data cutout apparatus is operable to shift the cutout start moment to a beginning of the phoneme by shifting the cutout start moment by the offset value.

**Claim 9 (New)** The sensitivity enhancement apparatus according to claim 8, further comprising:

an internal memory for storing the selected digital voice data output from the comparator;

a phoneme database for storing phoneme data to be collated with the selected digital voice data stored in the internal memory; and

a phoneme collation apparatus for cutting out, from the selected digital voice data stored in the internal memory, only a phoneme that coincides with the phoneme data stored in the phoneme database,

wherein the internal memory, the phoneme database, and the phoneme collation apparatus are connected between the comparator and the voice data cutout apparatus.

**Claim 10 (New)** The sensitivity enhancement apparatus according to claim 8, further comprising:

an internal memory for storing the selected digital voice data output from the comparator;

a phoneme sequence database for storing phoneme sequence data to be collated with the selected digital voice data stored in the internal memory; and

a phoneme sequence collation apparatus for cutting out, from the selected digital voice data stored in the internal memory, only a phoneme sequence that coincides with the phoneme sequence data stored in the phoneme sequence database,

wherein the internal memory, the phoneme sequence database, and the phoneme sequence collation apparatus are connected between the comparator and the voice data cutout apparatus.

**Claim 11 (New)** The sensitivity enhancement apparatus according to claim 8, wherein the cutout start moment is located at a moment of an utterance of a preset vowel or a preset consonant, and the cutout end moment is located at a moment of an utterance at which at least one phoneme is finished, resulting in a cutout unit of digital voice data being formed by a phoneme or a phoneme sequence.

**Claim 12 (New)** The sensitivity enhancement apparatus according to claim 8, wherein the voice data cutout apparatus includes a phoneme discrimination section for

arbitrarily selecting and setting a specific phoneme or a specific phoneme sequence, and cuts out, from the selected digital voice data, a unit of digital voice data formed of a phoneme or a phoneme sequence that coincides with the specific phoneme or the phoneme sequence selected and set by the phoneme discrimination section.